

# 48

## ISSUANCE TRANSMITTAL SHEET

ISSUANCE NUMBER:

MPD 8080.4

DATE:

November 28, 1967

## MATERIAL TRANSMITTED

1. This is a new Saturn V Program Directive.
2. The purpose of this Directive is to establish controls to preclude use of test hardware as flight hardware on flight stages.

## FILING INSTRUCTIONS

All MSFC Issuances will be filed in a standard 3-ring binder in numeric sequence without regard to the alphabetic prefix which identifies the type of issuance.



MPD 8080.4

EFFECTIVE DATE:

November 28, 1967

## PROGRAM DIRECTIVE

**SUBJECT:** PRECLUDE USE OF TEST HARDWARE AS FLIGHT HARDWARE  
ON FLIGHT STAGES

SATURN V PROGRAM DIRECTIVE NUMBER: 48 REVISION NUMBER:  
REVISION DATE:  
PREPARED BY: SATURN V TEST MANAGEMENT OFFICE (I-V-T)  
PHONE: 876-1574/ROBINSON

1. PURPOSE

This Program Directive establishes controls to:

PRECLUDE USE OF TEST HARDWARE AS FLIGHT HARDWARE  
ON FLIGHT STAGES

2. DEFINITION

Test hardware, as referred to herein, is hardware that has been:

- a. Subjected to development tests, qualification tests, reliability demonstration tests or any other tests except acceptance tests.
- b. Delivered to a test organization for any tests except acceptance tests.

3. SCOPE

This Program Directive is applicable to all MSFC elements responsible for Saturn V stage design, fabrication, assembly, test, manufacturing checkout, acceptance, shipment, prelaunch checkout, and launch operations.

4. REFERENCES

- a. Apollo Test Requirements NHB 8080.1, dated March 1967.
- b. Saturn V Program Directive Nr. 38, dated November 25, 1966, subject: Control of Non-Flight Hardware Installed on Saturn V Flight Stages.

5. POLICY

No test hardware shall be used as flight hardware on flight stages. (See para. 4.3.3.2, Apollo Test Requirements NHB 8080.1, dated March 1967). Ref. a

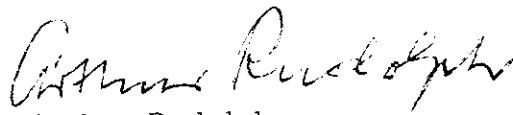
6. RESPONSIBILITIES

Each Saturn V Stage Manager shall:

- a. Ensure that the stage contractor establishes and implements procedures which:
  - (1) Preclude the use of test hardware as flight hardware on flight stages.
  - (2) Account for test hardware from test to final disposition.
- b. Monitor Material Review Board actions to insure compliance with this directive.
- c. Control disposition of test hardware by contractual requirements when applicable.
- d. Require the prime contractor to certify to the stage manager the following for all stages built prior to implementation of the procedures established in 6a., above:
  - (1) No test hardware has been installed as flight hardware on flight stages.
  - (2) All test hardware has been controlled and accounted for.
  - (3) No test hardware has been provided for spares delivered to KSC.
- e. Assure compliance with reference 4b., for cases in which test hardware is installed on flight stages temporarily (e.g. perform a fitting check, conduct a test, etc.). Ref. b

7. IMPLEMENTATION

This program directive shall be implemented immediately.

  
Arthur Rudolph  
Manager, Saturn V Program

November 28, 1967

MPD 8080.4

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